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| УДК 621.313.333  **A.A. Marchencko, S.U. Trudnev**  *Kamchatka State Technical University, Petropavlovsk-Kamchatsky, 683003*  *e-mail: Marchencko29@mail.ru*  **TEST** D**EVICES OF ASYNCHRONOUS MOTORS ON THE BASIS  OF ELECTRIC MACHINE CONVERTERS**  There is analysis of the main schemes for induction motors testing in these materials. The authors has identified two main groups of test stands, circuit designs of the majority are based on the use of rotary converters.  The advantages of such schemes are in the simplicity of design and maintainability and are determining factors in the choice of test method. At the same time, low efficiency and tests labour-intensiveness limit the possibility of application of these devices in ship repair shops significantly. After identifying the shortcomings and advantages of these devices the streamlined scheme for induction motors testing was proposed. Transducer on the basis of electrical machines having the properties of unimpeded recuperation into the network is on the scheme base.  **Key words**: asynchronous engine, loading methods, electric current, mechanical power, torque, switching, network frequency.  *DOI: 10.17217/2079-0333-2015-33-6-10*  **Information about authors**  **Marchenko Aleksej Aleksandrovich** – Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Senior tutor of Electro- and radioequipment of ships chair; [Marchencko29@mail.ru](mailto:Marchencko29@mail.ru)  **Trudnev Sergei Yurevich –** Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Senior tutor of Electro- and radioequipment of ships chair; [Trudnev@mail.ru](mailto:Trudnev@mail.ru) |
| УДК 621.43:629.5  **A.N. Mikhaylov1, A.V. Kostenko2, A.V. Lukichov3**  *1Donetsk National Technical University, Ukraine, Donetsk, 83001;*  *2Kamchatka State Technical University, Petropavlovsk-Kamchatskу, 683003;*  *3Donetsk Academy of Motor Transport, Ukraine, Donetsk, 83086*  *e-mail: andr13kost@list.ru*  **APPLICATION OF FUNCTION-ORIENTED TECHNOLOGIES IN THE MANUFACTURING OF MARINE INTERNAL-COMBUSTION ENGINES**  In the article it is considered the application of function-oriented technologies in the manufacturing of marine internal-combustion engines. There are also benefits, features, and building sequence of function-oriented techno-logies in it.  **Key words:** diesel engine industry, manufacturing engineering, surface layer of detail, service purpose of detail, hierarchy level.  *DOI: 10.17217/2079-0333-2015-33-11-14*  **Information about authors**  **Mikhajlov Aleksandr Nikolaevich –** Donetsk National Technical University; Donetsk, Ukraine, 83001; Doctor of technical sciences; Professor; Professor of Engineering technologies chair; tm@mech.dgtu.donetsk.ua  **Kostenko Andrej Viktorovich –** Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Candidate of technical sciences; Associate Professor; Assistant professor of Technological machinery and equipment chair; andr13kost@list.ru  **Lukichev Aleksandr Vladimirovich –** Donetsk Academy of Motor Transport; Donetsk, Ukraine, 83086; Candidate of technical sciences; Associate Professor; Assistant professor of Vehicles technical maintenance chair; a\_lukichov@mail.ru |
| УДК 621.311:629.5  **S.U. Trudnev, A.A. Marchenko**  *Kamchatka State Technical University, Petropavlovsk-Kamchatsky, 683003*  *e-mail: trudnev@mail.ru*  **QUALITY ANALYSIS OF THE SHIP ELECTRIC POWER SYSTEMS**  The materials evaluated the quality of marine power systems. Parameters affecting the quality of electrical energy are determined. Computer model of the ship's power system is designed. Conclusions about the reasonability of upgrading the main outdated power plants assemblies are made.  **Key words:** quality, diesel-generator, power plant.  *DOI: 10.17217/2079-0333-2015-33-15-17*  **Information about authors**  **Trudnev Sergei Yurevich –** Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Senior tutor of Electro- and radioequipment of ships chair; [Trudnev@mail.ru](mailto:Trudnev@mail.ru)  **Marchenko Aleksej Aleksandrovich** – Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Senior tutor of Electro- and radioequipment of ships chair; [Marchencko29@mail.ru](mailto:Marchencko29@mail.ru) |
| УДК 664.684:582.272  **M.V. Blagonravova, O.V. Mishchenko**  *Kamchatka State Technical University, Petropavlovsk-Kamchatsky, 683003* *е-mail:* *mblagonravova@mail.ru* **RESEARCH OF PHYSICAL AND CHEMICAL PARAMETERS  AND NUTRITIONAL VALUE OF BAKERY GOODS WITH FILLINGS (LIVER PATTIES) WITH THE ADDITION OF KELP**  The article presents the results of investigations of physical and chemical parameters and nutritional value of bakery products with fillings (baked pies) with the addition of Kamchatka brown seaweed Laminaria family - Laminariaceae. It was found that the cakes contained all the necessary nutrients and fully met the requirements of the standard for this type of product.  **Key words:** kelp, baked pies, nutrition value**,** organoleptic characteristics, bakery products.  *DOI: 10.17217/2079-0333-2015-33-18-21*  **Information about authors**  **Blagonravova Maja Vladimirovna –** Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Candidate of technical sciences; Assistant professor of Food production technologies chair; [mblagonravova@mail.ru](mailto:mblagonravova@mail.ru)  **Mishchenko Olga Vasilevna –** Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Undergraduate; olga.mishenko@list.ru |
| УДК 639.2 053.7 (265.51)  **P.A. Balykin**  *Southern Scientific Cent e-mail: balykin@ssc-ras.ru*  *re of RAS, Rostov-on-Don, 344006*  **CONSERVATION MEASURES OF WATER BIOLOGICAL RESOURCES**  **ON THE EXAMPLE OF KARAGINSKY SUBAREA**  The article deals with the necessity of “one species” approach refusal during fishery management. As the maim measure of fishery regulation one can use time-limit of fishing season. Using 2010–2011materials of Karaginsky subarea the preparation method of fishery prognosis for the given area is given.  **Кеу words**: water biological resources, rules of fishery management, restriction of terms of fishery, southwestern Bering Sea.  *DOI: 10.17217/2079-0333-2015-33-22-29*  **Information about authors**  **Balykin Pavel Aleksandrovich –** Southern Scientific Center of RAS; Rostov-on-Don, Russia, 344006; Doctor of biological sciences; Chief researcher of Aquatic bioresources in the southern seas basins department; balykin.pa@rambler.ru |
| УДК 582.263(571.66)  **S.O. Ocheretyana1, N.G. Klochkova1, T.A. Klochkova1, 2**  *1Kamchatka State Technical University, Petropavlovsk-Kamchatsky, 683003;*  *2Kongju National University, Kongju, 314-701, Korea*  *e-mail: ninakl@mail.ru*  **SEASONAL SPECIES COMPOSITION OF “GREEN TIDE”-FORMING ALGAE  FROM AVACHA BAY AND EFFECT OF ANTHROPOGENIC POLLUTION  ON PHYSIOLOGY AND GROWTH OF SOME GREEN ALGAE**  For last several decades, seaweed composition in the Avacha Bay has reduced dramatically and “green tides” became a common event. In this paper, we discuss peculiarities of seasonal development of species that compose major part of tidal seaweed communities. In ephemeral species, worsening of environmental conditions leads to reduction of their vegetation period or to neotenic development */* juvenilization*.* In some common species from the contaminated habitats, cellular abnormalities were found, such as intracellular dark-brown inclusions. These inclusions were absent in the same algal species from the clean habitats. When algae were kept in the laboratory culture after being collected from the field, the number of intracellular inclusions decreased significantly after 1 day, and they disappeared completely after 2-3 days. This may indicate their transformation during intracellular metabolic processes. It is our understanding that these inclusions might be metabolites, which could not be excluded from the cells due to defaults of functioning in heavily polluted environment.  **Key words:** anthropogenic pollution, «green tides», Kamchatka, cell abnormality*,* neotenic development.  *DOI: 10.17217/2079-0333-2015-33-30-36*  **Information about authors**  **Ocheretyana Svetlana Olegovna –** Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Researcher of science and innovation department; [sveta\_kam\_08@hotbox.ru](mailto:annaklimovae@mail.ru)  **Klochkova Nina Grigorevna –** Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Doctor of biological sciences; Vice-rector on scientific work; [ninakl@mail.ru](mailto:ninakl@mail.ru)  **Klochkova Tatyana Andreevna –** Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Candidate of biological sciences; Senior Researcher; [tatyana\_algae@mail.ru](mailto:tatyana_algae@mail.ru) |
| УДК 593.961(265.5)  **Е.G. Panina**  *Kamchatka branch of Pacific Geographical Institute FEB RAS, Petropavlovsk-Kamchatsky, 683000*  *e-mail:* [*panina1968@mail.ru*](mailto:vgstepanov@inbox.ru)  **LIST OF SPECIES OF THE SEA CUCUMBERS (HOLOTHUROIDEA) IN THE FAR-EASTERN SEAS OF RUSSIA, IV. FAMILIES SCLERODACTYLIDAE, THYONIDAE, YPSILOTHURIIDAE AND THYONIDIIDAE (ECHINODERMATA: HOLOTHUROIDEA: DENDROCHIROTIDA)**  You can find a list of species composition of sea cucumbers of the families Sclerodactylidae, Thyonidae, Ypsilothuriidae and Thyonidiidae of the order Dendrochirotida in the Far-Eastern seas of Russia. Every species is accompanied by modern name, synonymy, information about distribution in the Bering, Okotsk, Japan seas,  at south-east Kamchatka and Kuril Islands. Some species is illustrated with original pics of external view.  **Key words:** holothurian, sea cucumber, Holothuroidea, Dendrochirotida, Sclerodactylidae, Thyonidae, Ypsilothuriidae, Thyonidiidae, synonymy, list of species, distribution, Far-Eastern seas of Russia  *DOI: 10.17217/2079-0333-2015-33-37-53*  **Information about authors**  **Panina Elena Grigorevna –** Kamchatka branch of Pacific Geographical Institute FEB RAS; Petropavlovsk-Kamchatskу, Russia, 683000; Candidate of biological sciences; Research assistant of hydrobiological laboratory; [panina1968@mail.ru](mailto:vgstepanov@inbox.ru) |
| УДК 593.961(265.5)  **V.G. Stepanov**  *Kamchatka branch of Pacific Geographical Institute FEB RAS, Petropavlovsk-Kamchatsky, 683000*  *e-mail: vgstepanov@inbox.ru*  **LIST OF SPECIES OF THE SEA CUCUMBERS (HOLOTHUROIDEA)**  **IN THE FAR-EASTERN SEAS OF RUSSIA, V. THE ORDER ELASIPODIDA THÉEL, 1882 (ECHINODERMATA: HOLOTHUROIDEA)**  You can find a list of species composition of sea cucumbers of the order Elasipodida in the Far-Eastern seas of Russia. Every species is accompanied by modern name, synonymy, information about distribution in the Bering, Okotsk, Japan seas, at south-east Kamchatka and Kuril Islands. The species *Pannychia moseleyi* is illustrated with original pics of external structure and ossicles of the body wall.  **Key words:** holothurian, sea cucumber, Holothuroidea, Elasipodida, synonymy, list of species, distribution, Far-Eastern seas of Russia.  *DOI: 10.17217/2079-0333-2015-33- 54-66*  **Information about author**  **Stepanov Vadim Geogievich –** Kamchatka branch of Pacific Geographical Institute FEB RAS; Petropavlovsk-Kamchatskу, Russia, 683000; Candidate of biological sciences; Researcher of hydrobiological laboratory; [vgstepanov@inbox.ru](mailto:vgstepanov@inbox.ru) |
| УДК 334.012.64:745  **L.I. Kulakova**  *Far Eastern branch of the Russian Foreign Trade Academy of the Ministry of Economic Development  of the Russian Federation, Petropavlovsk-Kamchatsky, 683000*  *e-mail: milakul2606@rambler.ru*  **Handicraft as an object of small business: problems of the modern period**  Small business is the versatile and multi-faceted phenomenon, manifested in all branches and spheres of economy. This small business segment, as masters of folk arts and crafts production requires close attention and support. This article reviews the measures of state regulation of the activities of craftsmen, mechanisms of support of subjects of small business and ways to solve existing problems.  **Key words:** small business, handicraft, measures of state support.  *DOI: 10.17217/2079-0333-2015-33-67-70*  **Information about author**  **Kulakova Lyudmila Ivanovna** – Far Eastern branch of the Russian Foreign Trade Academy of the Ministry of Economic Development of the Russian Federation, Petropavlovsk-Kamchatskу, Russia, 683003; Head of Finance and Accounting chair; milakul2606@rambler.ru |
| УДК 352: 336.14  **V.A. Petrenko1, 2**  *1Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003;*  *Fiscal policy department of Elizovo municipal district administration;*  *Russia, Elizovo, Kamchatka region, 684000*  *e-mail: petrenkovikan@rambler.ru*  **NECESSITY OF LOCAL SELF-GOVERNMENT REFORMATION IN THE RUSSIAN FEDERATION, INNOVATIONS IN LEGISLATION CONCERNING FORMATION OF LOCAL BUDGETS**  The short analysis of development of local self-government in Russian Federation is shown. The main problems causing the necessity to change budget legislature are revealed.  **Key words:** budget income, tax base, standard of deductions.  *DOI: 10.17217/2079-0333-2015-33-71-75*  **Information about authors**  **Petrenko Viktor Andreevich** – Fiscal policy department of Elizovo municipal district administration; Russia, Elizovo, 68400; Candidate of economic sciences; Head of fiscal policy department; [petrenkovikan@rambler.ru](mailto:petrenkovikan@rambler.ru) |
| УДК 328.185+343.352(470)  **E.V. Rudkovskaya, N.V. Voychenko**  *Kamchatka State Technical University, Petropavlovsk-Kamchatskу, 683003*  *e-mail: eriskina2001@mail.ru*  **THE PROBLEM OF CORRUPTION IN THE RUSSIAN FEDERATION**  The main goal of the work is investigation of the peculiarities of corruption crimes in the Russian Federation. Achieving this goal involves tasks such as reviewing the genesis of corruption, identifying the characteristics of corruption crimes and analysis of methods of combating corruption.  **Key words:** corruption, bribe, offence, anti-corruption measures.  *DOI: 10.17217/2079-0333-2015-33-76-82*  **Information about authors**  **Rudkovskaya Elena Viktorovna** – Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Senior tutor of History and Philosophy chair; Elena2015@yandex.ru  **Vojchenko Natalya Viktorovna** – Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Assistant professor of History and Philosophy chair; eriskina2001@mail.ru |
| УДК 378.4:001.83(571.66+739.8)  **A.A. Sedelnikova**  *Kamchatka State Technical University, Petropavlovsk-Kamchatsky, 683003*  *e-mail: an-s82@yandex.ru*  **ON THE DEVELOPMENT OF COOPERATION MODELS WITH ALASKA UNIVERSITIES (USA) IN THE SPHERE OF INNOVATIVE EDUCATIONAL MANAGEMENT IMPLEMENTATION**  The questions concerning innovative educational management realization were discussed in the article. The model of international cooperation in the sphere of innovative educational management implementation between Federal Institution of Higher Education «Kamchatka State Technical University» (KamchatSTU) and Alaska Universities (USA) was proposed. This model was designed to modernize teaching methods in our University, which will attract foreign students, and to provide academic mobility of teachers and also to get international accreditation of educational programs in the University.  **Key words:** innovative educational management, Alaska, KamchatSTU, model, the University of Arctic (UArctic).  *DOI: 10.17217/2079-0333-2015-33-83-88*  **Information about author**  **Sedelnikova Anastasiya Alekseevna –** Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Research officer of science and innovation department; [oni@mail.ru](mailto:oni@kamchatgtu.ru) |
| УДК 639.2/.3(571.66)«1941/1945»  **N.V. Tolkacheva**  Kamchatka State Technical University, Petropavlovsk-Kamchatsky, 683003  *e-mail: love-lion@yandex.ru*  **THE FISHING INDUSTRY OF KAMCHATKA DURING THE YEARS  OF THE GREAT PATRIOTIC WAR**  N.V. Tolkachevain the article, which is based on published archive data of the Kamchatka Territory, defines the development of fishing industry of Kamchatka during the years of the Great Patriotic war 1941–1945. The author analyses aims of Kamchatka’sfishing industry in military period and shows labor heroism of fishermen, fish-processers and ship-repairers.  **Key words:** the Great Patriotic war, Kamchatka, fishing industry, labor heroism.  *DOI: 10.17217/2079-0333-2015-33-89-103*  **Information about author**  **Tolkacheva Nataliya Vladlenovna** – Kamchatka State Technical University; Petropavlovsk-Kamchatskу, Russia, 683003; Candidate of historical sciences; Assistant professor of History and Philosophy chair; love-lion@yandex.ru |